

Notice of Allowability

Application No.

09/950,091

Examiner

Robert Hodge

Applicant(s)

RICH, JOE G.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/8/04.
2. ☒ The allowed claim(s) is/are 7-9, 15-18, 22-33 and 40-46.
3. ☒ The drawings filed on 18 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks/Arguments, filed 3/8/05, with respect to the objections to claims 7-9, 15-18, 22-33, and 40-46 have been fully considered and are persuasive. The objections to claims 7-9, 15-18, 22-33, and 40-46 have been withdrawn. Furthermore the examiner acknowledges that claims 1-6, 10-14, 19-21, and 34-39 have been canceled and claims 7-9, 15-18, 22-33, and 40-46 have now been amended to include all of the limitations of the canceled claims. And therefore the claims now read over the prior art and the application is in condition for allowance.

Allowable Subject Matter

2. Claims 7-9, 15-18, 22-33, and 40-46 are allowed.

3. The following is an examiner's statement of reasons for allowance: The prior art made of record fails to teach a system containing a fuel cell portion in combination with an electrolyzer portion where both portions are dependent on one another and operate simultaneously, with fuel and oxidant tanks that have pressure relief valves as well as flow control valves used to regulate the gas flow into the fuel cell portion and that the system also uses an electrolyte recovery unit. Consequently the prior art also fails to teach a method for operating a system with the above listed structure. The prior art does allow for regenerative type fuel cells, which can be operated as a fuel cell or an electrolyzer but not both at the same time. And the prior art allows for an electrolyzer to be operated separately from a fuel cell in the same system where the two do not

Art Unit: 1746

depend from one another, but not in combination with one another or with the valve configuration as previously discussed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. U.S. Patent No. 6,833,207 to Joos et al. teaches a regenerative fuel cell system that has a separate fuel cell and electrolyzer compartment which feed one another and depend from one another
- b. U.S. Patent Nos. 4,322,270 & 4,276,145 to Skala teach a system containing separate fuel cell stacks and electrolyzer stacks
- c. U.S. Patent No. 3,180,813 to Wasp et al. teaches a fuel cell used to generate electricity that is provided to an electrolyzer
- d. U.S. Patent No. 2,384,463 to Gunn et al. teaches a system containing separate fuel cell stacks and electrolyzer stacks

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Hodge whose telephone number is (571) 272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

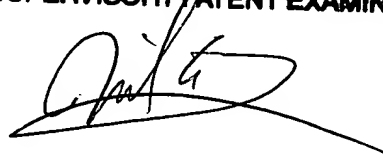
Art Unit: 1746

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RWH 4-4-05

MICHAEL BARR
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Michael Barr', with a long horizontal flourish extending to the right.